

## **DGMC INTERNAL MEDICINE INPATIENT WARD ROTATION**

### **I. Purpose/Rationale/Value**

It is expected that each resident on the inpatient Ward rotation will acquire:

1. The knowledge of a variety of patients with internal medicine problems, through a systematic approach to the patient by taking a thorough problem directed history, performing a careful physical examination and generating a differential diagnosis and plan of treatment.
2. Clinical management and interpersonal skills necessary for recognizing broad clinical syndromes and initiating proper therapy based upon a working knowledge of internal medicine.
3. The professional attitudes and behavior necessary to care for internal medicine inpatients.
4. The experience required to become a proficient general internist.

### **II. Objectives**

#### **A. General**

1. To participate in inpatient care so as to define the etiology, pathogenesis, clinical presentation and natural history of diseases seen during this rotation.
2. To develop an advanced level of skill and diagnosis as well as mature judgment and resourcefulness in therapy.
3. To develop an approach to the ethical, cultural and socioeconomic dimensions of illness.
4. To develop attitudes and skills needed for continued self-education throughout a professional career and the ability to critically assess the medical literature.
5. To emphasize the occupational and environmental impact upon disease in this population group.
6. To emphasize the principles of legal and governmental regulation and the impact of cost containment of medicine therein.
7. To recognize the importance of continuum of care and foster continuity of care.

## **B. Specific**

1. To performance appropriate procedures when needed.
2. To understanding the indications, contraindications and complications of these procedures.
3. To understand the etiology, pathophysiology, natural history, clinical presentation, diagnosis and management of at least the following conditions:
  - a. Community acquired pneumonia.
  - b. Venous thrombosis and thromboembolism.
  - c. Chronic obstructive lung disease.
  - d. Acute hepatitis - viral and alcoholic.
  - e. Electrolyte abnormalities - including hypo/hyponatremia, hypo/hyperkalemia, and hypercalcemia.
  - f. Endocrine diseases - to include diabetic ketoacidosis, hyperglycemic, hyperosmolar states.
  - g. Infectious diseases - to include urinary tract, GI tract (gastroenteritis), and CNS infections.
  - h. Acute Renal Failure
  - i. CNS disease - to include acute CVA, delirium, dementia and depression.
  - j. Cardiovascular diseases to include unstable angina and myocardial infarction (the acute forms of which are managed in the ICU/CCU).
  - k. Ethical, cultural and social implications of illness.

## **III. Principal Teaching Methods**

Progressive levels of responsibility for patient care will occur for interns, under the supervision of junior and senior residents, under the supervision of attending physicians.

Attending rounds, bedside teaching, didactic lectures, case presentations, assigned readings, and clinical conferences are all teaching methods to be utilized during this rotation.

**A. Teaching methods include, but are not limited to, the performance and mastery of the following:**

1. Medical history taking
2. Physical examination
3. Diagnostic test implementation and interpretation.
4. Formulation of problem lists/differential diagnosis.
5. Development of cost effective management plans.
6. Ongoing evaluation of patients in acute setting.
7. Performance of discharge planning.
8. Development of appropriate interpersonal relationships with patients, families, other residents, health care workers, and attending physicians.
9. Development of behaviors to include integrity, respect and compassion.
10. Clinical epidemiology and decision making.
11. Ethical, cultural and social implications of illness.

**B. Mix of Diseases**

A variety of acute medical problems requiring hospitalization to include cardiac, pulmonary, oncologic, gastrointestinal, renal, neurological, and infectious diseases.

**C. Patient Characteristics**

Patients of both genders with a wide range of ages including patients followed in the Ambulatory Clinics, referrals from VANCA clinics and from other treatment facilities, and patients admitted from the Emergency Department.

**D. Types of Clinical Encounters**

Admission evaluations and continuing hospital care and discharge care of patients admitted to the general medical wards; inpatient consultation from other hospital services.

**IV. Educational Content**

**A. Skills Objectives**

Residents are expected to learn the indications, contraindications, complications and limitations of specific procedures; develop technical proficiency in performing these procedures; and learn to interpret the results of the following specific procedures:

**Required (as outlined by the American Board of Internal Medicine)**

Arterial Puncture (ABG)  
 Venipuncture  
 Central Venous Catheterization  
 Thoracentesis  
 Paracentesis  
 Lumbar Puncture  
 Nasogastric Tube Placement  
 Knee Arthrocentesis  
 Bladder Catheterization

**B. Patient Characteristics:**

	Subintern	PGY-1	PGY2/PGY-3 Primarily & Supervisory
Number of Patients Followed Daily (Census)	2-6	2-12	2-20
Admissions Per 24 Hours	0-4	$\leq 5$	$\leq 10$
Admissions Per 48 hours	0-4	$\leq 8$	$\leq 16$

**C. Knowledge Objectives**

**Clinical Syndromes**

Chest Pain - Cardiac & non-cardiac  
 Congestive Heart Failure  
 Dyspnea and Wheezing  
 Nausea, Vomiting, and Anorexia  
 Abdominal Pain  
 Gastrointestinal Bleeding  
 Jaundice  
 Manifestations and Complications of Liver Failure  
 Acute Renal Failure  
 Abnormalities of the Hematocrit and Nucleated Blood Cell Count  
 Excess Bleeding and Clotting  
 Hypersensitivity and Anaphylaxis  
 Environmental Emergencies, Bites, and Stings  
 Febrile Syndromes. Approach to the Febrile Patient  
     Fever of Unknown Origin  
     Fever and Rash

- Rickettsial Infections
- Paramyxovirus (Measles, Parainfluenza, Mumps, and Rubella Virus, and Coronavirus Infections
- Fever and Infections in Travelers
- Leptospirosis
- Protozoa-malaria, babesiosis
- Fever in the Compromised Host
- Fever in the Hospitalized Patient

## **Specific Diseases**

- Atherosclerosis and the Dyslipoproteinemias
  - Disorders of Lipids and Lipoproteins
- Arterial Hypertension Crisis
- Coronary Heart Disease
  - Ischemic Heart Disease
  - Acute Myocardial Infarction
- Infective Endocarditis
  - S. aureus
  - S. epidermidis
  - Enterococcus
- Obstructive Lung Disease
  - Pulmonary Rehabilitation
  - Respiratory Therapy and Monitoring
  - Asthma exacerbation
  - Chronic Obstructive Pulmonary Disease
  - Cystic Fibrosis and Bronchiectasis
  - Pulmonary Transplantation
- Pulmonary Vascular Disease
  - Pulmonary Hypertension
  - Pulmonary Thromboembolism
  - Pulmonary Hypertensive Heart Disease
- Neoplasms of the Lung
  - Neoplasms of the Lung
  - Solitary Pulmonary Tumor
  - Lung Cancer
- Diseases of the Stomach and Duodenum
  - Peptic Ulcer Disease
  - Gastritis and Other Gastric Diseases
  - Tumors of the Stomach
  - Helicobacter species
- Diseases of the Small Intestine and Colon
  - Idiopathic Inflammatory Bowel Disease
  - Diseases of Intestinal Absorption
  - Tumors of the Small and Large Intestines

- Vascular Diseases of the Intestine
- Diverticular and Other Intestinal Diseases
- Acute and Chronic Hepatitis
  - Viral
  - Drug-and-Toxin-Induced Liver Disease
- Cirrhosis of the Liver
  - Alcoholic Liver Disease
  - Primary Biliary Cirrhosis, Wilson's Disease, Hemochromatosis, and Other Metabolic and Fibrotic Liver Diseases
  - Liver Transplantation
  - Hepatic Tumors
- Gallstones and Biliary Disease
  - Biliary Tract Stones and Associated Diseases
  - Other Diseases of the Gallbladder and Biliary Tree
- Pancreatic Diseases
- Fluid and Electrolyte Disorders
  - Disorders of Water Balance
  - Disorders of Sodium Balance
  - Disorders of Potassium Balance
  - Disorders of Acid-Base Balance
- Glomerular Diseases
  - Glomerular Diseases
  - Diabetic Nephropathy
  - Renal Manifestations of Dysproteinemias
  - Nephrotic Syndrome
- Diseases of the Tubules and Genitourinary Tract
  - Cystic Diseases of the Kidney
  - Disorders of Renal Tubular Transport
  - Tubulointerstitial Diseases
  - Toxic Nephropathy
  - Glomerular and Interstitial Hereditary Nephropathies
  - Obstructive Uropathy
    - BPH
    - Renal Cell Carcinoma
- Anemias
  - Iron Deficiency Anemia, the Anemia of Chronic Disease
  - Sideroblastic Anemia, and Iron Overload
  - Megaloblastic Anemia
  - Bone Marrow Failure
  - Hemoglobinopathies and Thalassemias
  - Hemolytic Anemia
- Bleeding Disorders
  - Thrombocytopenia and Disorders of Platelet Function
  - Disorders of Blood Coagulation
  - Blood Transfusion

- Thrombosis and Anticoagulation
- Disorders of the Thyroid
- Disorders of the Adrenal Gland
  - Disorders of the Adrenal Cortex
  - Disorders of the Adrenal Medulla
- Diabetes Mellitus
- Hypoglycemia/hyperglycemia
- Disorders of Bone and Bone Mineral Metabolism
  - Hypercalcemia
  - Hypocalcemia
  - Disorders of Phosphate Homeostasis
  - Disorders of Magnesium Homeostasis
  - Osteomalacia and Disorders of Vitamin D Metabolism
  - Paget's Disease of Bone
  - Osteoporosis & complications
  - Renal Bone Disease
  - Primary Hyperparathyroidism
  - Malignant Disease and the Skeleton
- Antirheumatic Drugs
- Systemic Lupus Erythematosus
- Vasculitis, Myositis and Fasciitis
  - Vasculitic Syndromes
  - Cryoglobulinemia
  - Inflammatory Myopathies
  - Diffuse Fasciitis with Eosinophilia
- Gout and Hyperuricemia
- Pneumonia
  - Pneumonia - community acquired and nosocomial
  - Mycoplasma Infections
  - Pneumocystis carinii Infection
  - Orthomyxovirus Infections (Influenza)
  - Infections Caused by Legionellae
  - Chlamydial species
  - Tuberculosis and Nontuberculous Mycobacterial Infections
  - Nocardia
  - Fungi
  - Hantavirus
- Intra-Abdominal Infections
  - Infections Caused by Bacteroides and Other Mixed Nonsporulating Anaerobes
  - Liver Abscesses and Cysts
- Gastrointestinal Infections
  - Gastrointestinal Manifestations of HIV Infection and AIDS
  - Infections Caused by Salmonella and Shigella Species
  - Rotavirus and Norwalk-Like Virus Infections

- Infections Caused by Campylobacter and Helicobacter Species
- Protozoa
- Helminths
- Genital and Urinary Tract Infections
- Infections of the Skin, Bone and Joints
  - Skin and Subcutaneous Infections
  - Osteomyelitis
  - Infections of the Joints
  - Streptococcus pyogenes Infections
  - Infections Caused by Borrelia (Species)
    - S. aureus
    - N. gonorrhoea
- Infections of the Nervous System
  - Acute Meningitis
  - Brain Abscess and Parameningeal Infections
  - Neisseria meningitidis Infections
  - Infections Caused by Haemophilus Species
  - Bunyavirus and togavirus Infection
  - Herpes simplex
  - Picornavirus
  - Cryptococcus
  - Encephalitis
- Bacteremia, Fungemia, and the Sepsis Syndrome
  - Gram-Negative Bacteremia and the Sepsis Syndrome
  - Enterococcal and Other Non-Group A Streptococcal Infections
  - Gram-Positive Aerobic Bacillary Infections, Corynebacterium and Listeria
    - S. aureus
    - S. epidermidis
  - Hospital Acquired Infection
  - Candida
  - Vibrio Infection
- HIV Infection and the Acquired Immunodeficiency Syndrome (AIDS)
  - Acquired Immunodeficiency Syndrome
  - Human Retrovirus Infections
- Cerebrovascular Disease (Stroke)
  - Principles of Neurologic Emergencies and Intensive Care
- Dementia, Delirium, and Behavioral Disorders
  - Cognitive Failure Dementia
  - Metabolic and Toxic Disorders
  - Behavioral Neurology
  - Anxiety
  - Mood Disorders
  - Personality Disorder, Maladaptive Illness Behavior, and



Somatization  
Thought Disorders  
Seizure Disorders  
Substance Abuse  
Clinical Toxicology  
Substance Abuse  
Alcohol withdrawal syndrome

## **V. Principal Ancillary Educational Materials**

60th MDG Medical Library  
Virtual library  
Up-to-date  
Med-Line Searches  
Review of Autopsies  
Individual divisional/departmental syllabus/bibliography for this rotation

## **VI. Methods to be Used for Evaluation**

Standard house officer evaluation forms to be completed by attending physician at the end of the rotation.  
Verbal feedback at the end of the rotation and mid-way through.  
Clinical Evaluation Exercise (CEX) at least 3 times early in year for all interns.  
Review of all admissions - diagnoses and quantity.  
Review required and elective procedures performed - certification by faculty.  
Review of the medical records.

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